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-1-

DRAFT AMENDMENT

Claim listing

1-45. Canceled.

46.   Canceled.

(Dependent Claims 47, 48 and 50 to be renumbered and amended to be directly or indirectly dependent on claim 125)

47.   (Previously Presented) The method of claim 46 further comprising the steps of:
        upon receiving said continuation message, verifying, by said supervising program, that a portion of said continuation message is equal to said corresponding portion sent in said call-up message; and
        upon successful verification, by said supervising program, allowing by said supervising program continued use of said copy of software associated with said tag in said tag table on said user device.

48.   (Previously Presented) The method of claim 47 further comprising the step of:
        upon failure of said verification, by said supervising program, of said portion of said continuation message, resending by said supervising program said call-up message to said guardian center

49.   Canceled.

-2-

50.   (Previously Presented) The method of claim 46 further comprising the steps of:
    upon failing to receive said continuation message within a timeout period, said supervising program resending said call up message to said guardian center; and
    upon receiving said resent call-up message from said supervising program, re-sending, by said guardian center, said continuation message previously sent in response to the resent call-up message upon verifying that said received resent call-up message equals said previously received call-up message.

51.   Canceled.

(Dependent Claims 52-72 to be renumbered and amended to be directly or indirectly dependent on claim 125)

52.   (Previously Presented) The method of claim 51 further comprising the step of:
    upon receiving said message from said guardian center, invalidating said tag table by said supervising program.

53.   (Previously Presented) The method of claim 52 further comprising the step of:
    upon failure of said verification, rejecting, by said guardian center future call-ups including said tag table identifier value.

54.   (Original) The method of claim 47 further comprising the step of:
    replacing, by said supervising program, within said tag table said hash function value of said tag table sent in said previous call-up message by said hash function value of said tag table sent in said current call-up message.

55.   (Previously Presented) The method of claim 47 comprising the further step of:
    replacing, by said supervising program, within said tag table said hash function value of said tag table sent in said continuation message received in said previous call-up by said hash function value of said tag table sent in said continuation message received in said current call-up.

-3-

56.   (Original) The method of claim 46 wherein said call-up to a guardian center occurs each time an operating system or said supervising program are loaded into memory in said user device.

57.   (Original) The method of claim 47 further comprising the step of:
        measuring, by said supervising program, an elapsed time between a first call-up to a guardian center and a second call-up to a guardian center, by use of one or more event counters.

58.   (Original) The method of claim 57 wherein said event counters are updated periodically as recorded by a clock.

59.   (Original) The method of claim 57 further comprising the steps of:
        storing by said guardian center, a current time value in said continuation message; and
        setting, by said supervising program, an event counter to said current time.

60.   (Previously Presented) The method of claim 47 further comprising the steps of:
        storing by said supervising program, a plurality of tag tables, said tag tables having said tag table identifier value of said tag table whose hash function values were sent to said guardian center in a plurality of most recent call-ups, each of said tag tables storing user device descriptive values;
        storing, by said guardian center, in said continuation message, a plurality of hash function values of said tag tables sent in said plurality of said most recent call-ups; and
        upon receiving said continuation message, said supervising program, computing hash function values of said stored plurality of tag tables and further verifying that said computed hash function values are equal to said hash function values in said continuation message.

-4-

61. (Previously Presented) The method of claim 60 further comprising the step of:

checking, by said supervising program, whether said user device descriptive values in said tag tables whose hash functions were sent in said plurality of most recent call-ups belong to a plurality of user devices.

62. (Original) The method of claim 61 wherein the step of checking further comprises the step of:

searching said plurality of tag tables for two successive tag tables including user device descriptive values which differ by more than a specified number of corresponding values.

63. (Original) The method of claim 62 wherein the step of checking further comprises the step of:

searching said plurality of tag tables for a first tag table, a second tag table and a third tag table, the second tag table sent in a call-up that occurred later than a call-up in which said first tag table was sent and said third tag table sent in a call-up that occurred later than said call-up in which said second tag table was sent and wherein said user device descriptive values stored in said first tag table and in said second table differ in more than a specified number of corresponding values and said user device descriptive values stored in said first tag table and in said third tag table differ in fewer than a specified number of corresponding values.

64. (Previously Presented) The method of claim 61 further comprising the step of:

disabling future call-up messages including said tag table identifier value by said guardian center upon determining that said user descriptive values in tag tables sent in said plurality of most recent call-ups belong to a plurality of user devices.

65. (Original) The method of claim 47 wherein said call-up message includes a new randomly chosen value occurring only once.

-5-

66.   (Original) The method of claim 46 wherein said continuation message includes a superfingerprint.

67.   (Previously Presented) The method of claim 66 further comprising the steps of:

including a current user device time on said user device in said call-up message;

verifying, by said guardian center whether said current user device time is within a specified tolerance of a clock time on said guardian center;

computing, by said guardian center, a hash function value of superfingerprints included in continuation messages sent to said supervising program in response to previous call-up messages and included in said continuation message, said superfingerprints included in said continuation messages sent to said supervising program in previous call-ups being stored on said user device;

storing, by said guardian center, said hash function value in said continuation message forwarded to said supervising program;

verifying, by said supervising program, that a hash function value of said superfingerprints stored on the user device and included in said continuation message is equal to said received hash function value; and

appending, by said supervising program, on said user device said new superfingerprint to said superfingerprints stored on said user device.

68.   (Previously Presented) The method of claim 46 wherein said call-up message includes a current user device time on said user device.

69.   (Original) The method of claim 68 wherein the step of verifying further comprises the step of:

verifying, by said guardian center whether said current user device time is within a specified tolerance of a clock time on said guardian center.

-6-

70.   (Original) The method of claim 46 wherein the step of verifying further comprises the step of:

verifying, by said guardian center that a time difference between said arrival of said call-up message and said previous call-up message exceeds a specified minimum.

71.   (Original) The method of claim 46 wherein the step of verifying further comprises the step of:

verifying by said guardian center that a time difference between said arrival of said call-up message and said previous call-up message is below a specified maximum.

72.   (Previously Presented) The method of claim 47 further comprising the step of:

upon receiving said continuation message, verifying by said supervising program, that a total usage measured across all items in said tag table exceeds a total usage measured across all items in said tag table associated with said previous call-up message.

73-124. Canceled.

125.   (Currently Amended) A method for supervising usage of software on a user device comprising the steps of:

computing, by a supervising program within said user device, a first hash function value of a tag table;

sending, by said supervising program, a call-up message to a guardian center, said call up message comprising said first hash function value, ~~said~~ an identifier value of said tag table, and a second hash function value of said tag table sent in a previous call-up message;

verifying, by said guardian center, that said hash function value of said tag table sent in said previous call-up message is a most recently stored value in a list of hash function values stored by said guardian center and associated with said identifier value of said tag table;

-7-

upon successful verification by said guardian center, appending said received first tag table hash function value to said list of hash function values associated with said identifier value of said tag table; and

sending, by said guardian center, a continuation message to said supervising program, said continuation message comprising a superfingerprint and a portion of said call-up message to detect and halt the duplication of a tag table on several user devices; said superfingerprint comprising a list of hash functions resulting from hashes performed on software, a weight value W which defines how many times the supervising program should run, P indications that the supervising program must hold in order to run, and computer programs used by the supervising program to detect invalidly running software.

126. (Previously Amended) The method of claim 125 wherein said call-up message and said continuation message are sent over a secure channel.

127. (Currently Amended)The method of claim 46 125 wherein upon detecting use of the infringing copy of software in the user device, the supervising program in the user device halts use of the infringing copy.

128. (Currently Amended) The method of claim 46 125 wherein the continuation message is digitally signed.

129. (Currently Amended) The method of claim 46 125 wherein the tag table identifier value is generated by hardware.